

Comprehensive Plan Cost Table Version 13 Costs through July 28, 2017		UAO COST ESTIMATE JULY 2012
1	MassDEP Funding	
2	USACE Funding	
3	Pro-Serv Contract (WQM/Monit)	
4		
5	Intertidal	\$ 78,400,763
6	UH Intertidal	
7	Eastern shoreline	
8	Western Shoreline	
9	Parcel 265	
10	PMC	
11	LH	
12	BtB	
13	Marsh Island	\$ 3,380,452
14	Aerovox	
15	Aerovox Interim Cap	
16	Interim Cap LTM	
17		
18	Cell 1	\$ 23,958,630
19	Cell 1 Interim Remedy	
20		
21	Full Demob	\$ 7,977,325
22		
23	Dredge & Fill LHCC	\$ 39,838,604
24	Construct CAD Cell	
25	Dredge and Fill LHCC - Jacobs	
26	UH & LH to LHCC Mechanical - Jacobs	
27	o LHCC Mechanical - Jacobs (37 C&D)	
28	Dredge and Fill LHCC - BV	
29	Survey Contract - BV	
30	Between the Bridges Subtidal	
31	Dredge Cleanup Passes - Jacobs	
32	Cap LHCC	\$ 5,780,303
33	MU-22	
34	MU-26	
35	MU-29	
36	PMC	
37	Area R	

38	Area L	
39		
40		
41	Hydraulic Dredging	\$ 154,456,091
42	Temporary Pipeline Relo	
43	Capping DDA	
44	Sand Cover	
45	Maintenance of Salt Marsh Restoration	
46	LHCC O&M	\$ 580,163
47	Seafood Monitoring	\$ 721,387
48	Site Wide Benthic LTM	\$ 818,703
49	Fixed Costs	\$ 54,927,518
50	Project Management and Admin	
51	Site Ops and Warehouse	
52	Air Monitoring	
53	Hybrid Dedging	
54	Cable Crossing	
55	Area O	
56	Area N	
57	Area H	
58	Area I	
59	Area P	
60	Area S	
61	Areas T & T'	
62	MU-31	
	SUBTOTAL	\$ 370,839,939
	SETTLEMENT AMOUNT	
	INTEREST	
	MassDEP Payment for LTM	
	Remaining funding	
	TOTAL	
	DEFERRED EXPENSES	
	Aerovox Sediment Removal	
	LTM Costs after 2021	
	Capping DDA	\$ 1,781,530
	Costs to remove Government Owned Property	
	Cells 1,2, 3 Final Remedy - no mixed waste	
	Cells 1, 2, 3 Final Remedy	
	TOTAL DEFERRED EXPENSES	

EXPENDED TO DATE POST SETTLEMENT 07/28/2017	COST TO COMPLETE REMAINING 2017-2021	TOTAL COST AT COMPLETION IN 5 YEARS	TOTAL COST AT COMPLETION WITH CONTINGENCIES
	Project Complete in 5 Years		
\$ 600,000	\$ 1,000,000	\$ 1,600,000	\$ 1,600,000
\$ 3,900,000	\$ 8,300,000	\$ 12,200,000	\$ 13,420,000
\$ 7,500,000	\$ 12,500,000	\$ 20,000,000	\$ 22,000,000
\$ -	\$ 57,266,772	\$ 57,266,772	\$ 68,720,127
	\$ 42,478,875		
	\$ 14,787,897		
\$ 2,229,750	\$ -	\$ 2,229,750	\$ 2,229,750
\$ 6,886,700	\$ 438,360	\$ 7,325,060	\$ 7,691,313
	\$ 278,114	\$ 278,114	\$ 333,737
\$ -	\$ 918,985	\$ 918,985	\$ 1,010,884
	\$ 2,282,220	\$ 2,282,220	\$ 2,510,442
\$ -	\$ 4,800,000	\$ 4,800,000	\$ 6,240,000
	\$ 750,000	\$ 750,000	\$ 900,000
	\$ 1,000,000	\$ 1,000,000	\$ 1,200,000
\$ -	\$ 5,785,460	\$ 5,785,460	\$ 7,810,370
		\$ -	\$ -
\$ 9,563,000	\$ -	\$ 9,563,000	\$ 9,563,000
\$ 14,155,772		\$ 14,155,772	\$ 14,155,772
\$ 4,663,907	\$ 462,280	\$ 5,126,187	\$ 5,126,187
	\$ 1,060,000	\$ 1,060,000	\$ 1,166,000
\$ -	\$ 14,915,983	\$ 14,915,983	\$ 14,915,983
\$ -	\$ 700,000	\$ 700,000	\$ 700,000
\$ -	\$ 2,573,520	\$ 2,573,520	\$ 2,830,872
	\$ 3,380,000	\$ 3,380,000	\$ 3,718,000
\$ -	\$ 5,100,000	\$ 5,100,000	\$ 5,992,500
	\$ 102,720	\$ 102,720	\$ 112,992
	\$ 990,600	\$ 990,600	\$ 1,089,660
	\$ 2,565,440	\$ 2,565,440	\$ 2,821,984
	\$ 1,836,800	\$ 1,836,800	\$ 2,020,480
	\$ 3,685,440	\$ 3,685,440	\$ 4,053,984

	\$ 2,196,000	\$ 2,196,000	\$ 2,415,600
\$ 51,365,786	\$ -	\$ 51,365,786	\$ 51,365,786
\$ -	\$ 1,235,659	\$ 1,235,659	\$ 1,235,659
\$ -	\$ -	\$ -	\$ -
\$ -	\$ 2,925,000	\$ 2,925,000	\$ 3,217,500
	\$ 500,000	\$ 500,000	\$ 550,000
\$ -	\$ 689,052	\$ 689,052	\$ 723,504
\$ -	\$ 579,290	\$ 579,290	\$ 579,290
\$ 536,021	\$ 550,000	\$ 1,086,021	\$ 1,140,322
\$ 17,093,002	\$ 7,905,128	\$ 24,998,130	\$ 27,497,943
\$ 2,866,979	\$ 3,917,648	\$ 6,784,626	\$ 7,463,089
\$ 1,077,021	\$ 1,384,741	\$ 2,461,763	\$ 2,707,939

	\$ 25,746,215	\$ 25,746,215	\$ 28,320,837
	\$ 15,093,352	\$ 15,093,352	\$ 16,602,687
	\$ 7,198,882	\$ 7,198,882	\$ 7,918,770
	\$ 8,697,550	\$ 8,697,550	\$ 9,567,305
	\$ 3,581,988	\$ 3,581,988	\$ 3,940,187
	\$ 3,747,005	\$ 3,747,005	\$ 4,121,705
	\$ 10,077,057	\$ 10,077,057	\$ 11,084,763
	\$ 1,542,210	\$ 1,542,210	\$ 1,696,431
	\$ 1,339,101	\$ 1,339,101	\$ 1,473,011
\$ 122,437,937	\$ 231,598,572	\$ 354,036,509	\$ 387,556,364
		\$ 366,250,000	\$ 366,250,000
		\$ 5,000,000	\$ 5,000,000
		\$ 1,500,000	\$ 1,500,000
		\$ 15,713,491	\$ (17,806,364)
\$ -	\$ 18,627,241	\$ 18,627,241	\$ 27,940,861
\$ -	\$ 1,781,530	\$ 1,781,530	\$ 2,137,836
		\$ 16,613,069	\$ 21,596,990
	\$ 22,969,595	\$ 22,969,595	\$ 29,860,474
	\$ 43,378,366	\$ 59,991,435	\$ 81,536,161

	% Contingency	Cost to complete with contingency	Volume to be Removed (cu. yds)	FUNDING NEEDED 2017	FUNDING NEEDED 2018	FUNDING NEEDED 2019
	0%	\$ 1,000,000		\$ 200,000	\$ 200,000	\$ 200,000
	10%	\$ 9,130,000		\$ 2,750,000	\$ 2,750,000	\$ 1,210,000
	10%	\$ 13,750,000		\$ 2,750,000	\$ 2,750,000	\$ 2,750,000
		\$ -				
	20%	\$ 68,720,127			\$ 34,360,063	\$ 34,360,063
			35,130			
			14,437			
	0%	\$ -				
	5%	\$ 460,278				
	20%	\$ 333,737	230			
	10%	\$ 1,010,884	760			
	10%	\$ 2,510,442				
		\$ -				
	30%	\$ 6,240,000		\$ 6,240,000		
	20%	\$ 900,000			\$ 180,000	\$ 180,000
		\$ -				
		\$ -				
	20%	\$ 1,200,000			\$ 1,000,000	\$ 50,000
		\$ -				
	35%	\$ 7,810,370				\$ 3,250,000
	0%	\$ -				
	0%	\$ -				
	0%	\$ -				
	0%	\$ 462,280			\$ 462,280	
	10%	\$ 1,166,000				
	0%	\$ 14,915,983		\$ 18,700,000		
	0%	\$ 700,000		\$ 700,000		
	10%	\$ 2,830,872	12,868		\$ 2,830,872	
	10%	\$ 3,718,000	16,900		\$ 3,718,000	
	18%	\$ 5,992,500				
	10%	\$ 112,992	514			\$ 112,992
	10%	\$ 1,089,660	4,953			\$ 1,089,660
	10%	\$ 2,821,984	12,827			\$ 2,821,984
	10%	\$ 2,020,480	22,684			\$ 2,020,480
	10%	\$ 4,053,984	18,427			\$ 4,053,984

10%	\$ 2,415,600	10,980			\$ 2,415,600
0%	\$ -				
0%	\$ 1,235,659				
20%	\$ -				
10%	\$ 3,217,500				\$ 3,217,500
10%	\$ 550,000			\$ 275,000	
5%	\$ 723,504				
0%	\$ 579,290				\$ 579,290
5%	\$ 577,500				\$ 577,500
	\$ -				
10%	\$ 8,695,641		\$ 579,709	\$ 1,739,128.12	\$ 1,739,128.12
10%	\$ 4,309,412		\$ 287,294	\$ 861,882.47	\$ 861,882.47
10%	\$ 1,523,216			\$ 304,643	\$ 304,643

10%	\$ 28,320,837				
10%	\$ 16,602,687	29,361		\$ 16,602,687	
10%	\$ 7,918,770	14,004		\$ 7,918,770	
10%	\$ 9,567,305	16,919		\$ 9,567,305	
10%	\$ 3,940,187	6,968		\$ 3,940,187	
10%	\$ 4,121,705	7,289		\$ 4,121,705	
10%	\$ 11,084,763	19,603		\$ 11,084,763	
10%	\$ 1,696,431	3,000		\$ 1,696,431	
10%	\$ 1,473,011	2,605		\$ 1,473,011	
	\$ 261,503,591		\$ 32,207,004	\$ 107,836,729	\$ 61,794,707
	\$ -				
	\$ -				
50%	\$ 27,940,861				
	\$ -				
20%	\$ 2,137,836				
30%	\$ 21,596,990				
30%	\$ 29,860,474				
	\$ 81,536,161				

FUDNING NEEDED 2020	FUNDING NEEDED 2021	SUBTOTAL FUNDING REQUIRED	2022	2023	2024
\$ 200,000	\$ 200,000	\$ 1,000,000			
\$ 1,210,000	\$ 1,210,000	\$ 9,130,000			
\$ 2,750,000	\$ 2,750,000	\$ 13,750,000			
		\$ 68,720,127			
		\$ -			
		\$ -			
		\$ -			
		\$ -			
		\$ 6,240,000			
\$ 180,000	\$ 180,000	\$ 720,000	\$ 180,000.00		
\$ 50,000	\$ 100,000	\$ 1,200,000			
\$ 3,250,000	\$ 1,310,370	\$ 7,810,370			
		\$ -			
		\$ -			
		\$ 462,280			
\$ 3,591,942		\$ 3,591,942			
		\$ 18,700,000			
		\$ 700,000			
		\$ 2,830,872			
		\$ 3,718,000			
\$ 5,992,500		\$ 5,992,500			
		\$ 112,992			
		\$ 1,089,660			
		\$ 2,821,984			
		\$ 2,020,480			
		\$ 4,053,984			

TOTAL (Cost to Complete Remaining Includes below the line LTM costs)	RFP date	Start	Finish
\$ 1,000,000.00			
\$ 9,130,000.00			
\$ 13,750,000.00			
\$ 68,720,126.75	12/1/2017	5/1/2018	6/1/2019
\$ -			
\$ -	12/1/2017	3/1/2018	6/1/2018
\$ -	5/1/2018	9/30/2018	10/29/2018
\$ -	4/1/2017	8/1/2017	11/1/2017
\$ 6,240,000.00	12/1/2017	5/1/2018	7/1/2018
\$ 900,000.00			
\$ 1,200,000.00	1/1/2018	6/1/2018	6/1/2022
\$ 7,810,370.47	10/1/2018	1/1/2019	1/1/2023
\$ 462,279.84			
\$ 3,591,942.00			
\$ 18,700,000.00		6/1/2017	5/1/2018
\$ 700,000.00		5/1/2017	5/1/2018
\$ 2,830,872.00	5/1/2018	11/2/2018	10/29/2018
\$ 3,718,000.00	2/1/2018	6/1/2018	11/1/2018
\$ 5,992,500.00	11/1/2018	12/1/2019	1/1/2020
\$ 112,992.00			
\$ 1,089,660.00			
\$ 2,821,984.00			
\$ 2,020,480.00			
\$ 4,053,984.00			

NOTES

2014-2021 - ETD for 3 years - Needs verification from 3/9/17 meeting - based on EPA comment

Per Corps - \$3.9M (2014-2016), 2.5M (2017-2018) \$1.1M/yr (2019 - 2021)

assumes \$2.5M/yr - cost provided by Corps

Assume work start in 3/18 and is fully funded and east and west sides done simultaneously, totaled using below two

Costs based upon engineers estimate \$1209/yd, inc excavation, restoration, T&D -see backup

Costs based upon engineers estimate \$1024/yd, incl excavation, restoration, T&D - see backup

Not included in UAO estimate

UAO included this with intertidal volume. CTC includes SES, T&D, restoration, demob

Not Contracted. Assumes 230 cu yds from North Street property only

Not Contracted. Assumes 760 cubic yards @ \$878/yd

Work is contracted. Cost from RAC TO#3 negotiated proposal june 30 2017 - less management time

Not Contracted. Assumed 3 ft carbon sand cover (per Corps direction). Temporary solution does not complete final r

Not Contracted. Assumed annual benthic and sampling of cover and reporting. No replacement costs.

Not Contracted. Assumed temporary AS/SVE for reduction of CVOCs.

CTC from May 2016 Jacobs proposal. Contingency based upon undefined future status and necessary improvement of Areas C and D.

Complete - UAO costs for all work related to CAD Cell, less the \$11.3M from EPA HQ (need to verify if paid back) complete

Work is complete, pending final invoicing. UH and LH Mech dredge - MU 25, 28, silt curtains, Moby Dick.

One plant 120 days (37C&D), includes current Jacobs costs

Per USACE Email (3/16/17) changed from \$18M to \$17M. Fixed Cost Contract estimate

Per USACE Email (3/16/17) changed from \$800k to \$700k. Based on award to Bryant

Negotated and Awarded, added fee in Rev9

10% cleanup passes, based on BV CTC

Cost estimate from EPA. Cost need to be revised, requires a small group meeting discussion prior to cost estimate r

Includes 4 inches overdredge (513.6 yds to LHCC, avg conc of removed material is 55.6 ppm)

Includes 4 inches overdredge (4953 yds to LHCC, avg conc of removed material is 80.4 ppm)

Includes 4 inches overdredge (12827.2 yds to LHCC, avg conc of removed materia is 56.3 ppm)

Includes 4 inches overdredge (22684 yds to LHCC, avg conc of removed material is 80.4 ppm)

Includes 4 inches overdredge (18427.2 yds to LHCC, avg conc of removed material is 101.6 ppm)

Includes 4 inches overdredge (10980.2 yds to LHCC, avg conc of removed material is 98.3 ppm)
CUBIC YARDS TO LHCC - 70385.2
2014 through 2016 dredging less \$12M, PMC, Parcel 265, and fixed costs
Negotated and Awarded
Capping of DDA cost estimated from ESD 4
This is an assumed volume of 100,000 cy, mechanical placement - ASSUMES ONLY 25% COVER USED - ORIGIN
Year 1 after restoration and Year 5 - Not previously included.
Cost to Complete is escalated UAO cost (3.5%)
Costs from MassDEP
Cost to Complete is escalated UAO cost (3.5%), assume 1/5yr
Jacobs Fixed Costs,
Air Monitoring for 2017 is funded.
Based on initial proposal for TO#4 (55,000 yds), revised - see subtidal back up - includes Mob/winterization-already f
Includes 4 inches overdredge (29360.5 yds, avg conc of removed material is 266.5 ppm)
Includes 4 inches overdredge (14003.7 yds, avg conc of removed material is 113.3 ppm)
Includes 4 inches overdredge (16919 yds, avg conc of removed material is 187.2 ppm)
Includes 4 inches overdredge (6967.9 yds, avg conc of removed material is 75.1 ppm) Max conc exceed 700 ppm in
Includes 4 inches overdredge (7288.9 yds, avg conc of removed material is 58.4 ppm) Max conc exceed 1,900 ppm
Includes 4 inches overdredge (19602.5 yds, avg conc of removed material is 75.3 ppm) Max conc exceeds 500 ppm
Assumes 3000 cubic yards
Includes 4 inches overdredge (2604.9 yds, avg conc of removed material is 36 ppm) Max conc exceed 400 ppm in s
99,747
EPA assumption, correct interest rates and values to be provided, per EPA \$2M in avail. Funding but not in continge
Assume 600 CY/Day production
LHCC O&M, Seafood and Benthic
Included in Cells #123 Final Remedy.
Cost estimate requires Government Property List and direction for disposal or reuse.
Includes \$1,781,530 to cap the DDA.
Includes \$1,781,530 to cap the DDA.

items.

remedy.

revision.

ALLY \$11.7 AND 12.87 W/C

unded

some samples
in some samples
in some samples

ome samples

ncy.